

Abstract of the Disclosure

The invention provides a thermal tolerant cellulase that is a member of the glycoside hydrolase family. The invention further discloses this cellulase as Gux1. Gux1 has been isolated and
5 characterized from *Acidothermus cellulolyticus*. The invention further provides recombinant forms of the identified Gux1. Methods of making and using Gux1 polypeptides, including fusions, variants, and derivatives, are also disclosed.